

ABSTRACT

A vibration isolator with non-circular seating features that allow a payload to be attached to a support plate without twisting cables of the isolator. The cables couple the support plate to a piston that can move within an air charged housing. The support plate may have a non-circular shoulder that can sit within a non-circular seat of the housing when the isolator is deflated. The non-circular shapes prevent rotation of the support plate and twisting of the cables when the payload is attached to the deflated isolator. The vibration isolator may also have antirotation features to prevent twisting of the cables when the isolator is charged and the support plate is in a fully extended position.